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09/194,773    03/31/99    GRASER

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IM52/0628

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 15

Application Number: 09/194,773

Filing Date: March 31, 1999

Appellant(s): GRASER ET AL.

**MAILED**

JUN 28 2001

Richard L. Mayer  
For Appellant

**GROUP 1700**

**EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed April 19, 2001.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The amendment after final rejection filed on December 12, 2000 has been entered.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

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**(7) *Grouping of Claims***

The rejection of claims 13, 14 and 24 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

|           |                  |        |
|-----------|------------------|--------|
| 5,144,249 | KURISHITA et al. | 9-1992 |
| 5,871,313 | NENADIC et al.   | 2-1999 |

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 13,14 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over KURISHITA et al. (5,144,249) in view of NENADIC et al. (5,871,313).

KURISHITA et al. teaches a sintered ceramic sensing element for determining oxygen content in exhaust gasses of an internal combustion engine having chamfered edges having a flat surface (see figure 1c ). KURISHITA et al. also discloses that the solid electrolyte body of sensors may be formed from materials such as doped zirconium oxide.

NENADIC et al. discloses that the most cost effective method of producing chamfered substrates is to chamfer the parts in "green" or unfired state. See col. 1, lines 65-67. It would have been obvious to one having ordinary skill in the art at the time of the invention to chamfer the sensing element of KURISHITA et al. in the green state in view of the teaching of NENADIC et al..

**(11) Response to Argument**

***With respect to the rejection of the claims under 35 USC 103 applicant argues:***

**Nenadic is plainly a non-analogous reference with respect to the presently claimed subject matter. Nenadic is plainly not in the field of the claimed subject matter and is therefore directed to addressing the entirely different problem of cracking caused by "fixture off" handling in electronic substrates, and therefore simply does not concern the problem of sensor elements that may experience cracking due to high temperatures.**

This argument is not persuasive. Nenadic is not a non-analogous reference. Although, it is not related to solving the problem of thermal stresses, it is directed to a method of chamfering a ceramic article. The claimed process is a process of blunting or chamfering a ceramic article and thus, Nenadic is clearly analogous.

**There is no motivation to combine or modify the Kurishita [reference] in view of the Nenadic reference.**

This argument is not persuasive. Nenadic discloses the “most cost effective method of producing chamfered substrates”. In view of the generic nature of the disclosure in Kurishita et al. (i.e. the lack of a specific method being taught), it is submitted that the motivation for combining the references would be to achieve the most cost effective method of chamfering the sensors disclosed in Kurishita et al.

**To reject a claim as obvious under 35 USC 103, the prior art must disclose or suggest each claim element and it must also suggest combining the elements in the manner contemplated by the claim. Thus, the “problem confronted by the inventor must be considered in determining whether it would have been obvious to combine the references in order to solve the problem”.**

This argument is not persuasive. The primary reference teaches the problem addressed by the invention (i.e. the improvement of thermal shock resistance). See col. 3, lines 1-5; and col. 3, line 60 – col. 4, line2 of KURISHITA et al.

**The Final Office Action reflects a subjective “obvious to try” standard, and therefore does not reflect the proper evidence to support an obviousness rejection based on the references relied upon.**

This argument is not persuasive. It is submitted that since there is motivation for combining the references, and the motivation is disclosed within the references, no “obvious to try” standard has been used. As stated above, Nenadic discloses the “most cost effective method of producing chamfered substrates”. In view of the generic nature of the disclosure in Kurishita

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et al. (i.e. the lack of a specific method being taught), it is submitted that the motivation for combining the references would be to achieve the most cost effective method of chamfering the sensors disclosed in Kurishita et al.

**Not even a prima facie case has been made in the present case for obviousness, since the Office Actions to date never made any findings, as such, for example, regarding in any way whatsoever what a person having ordinary skill in the art would have been at the time the claimed subject matter of the present application was made.**

This argument is not persuasive. It is submitted that the disclosure of the references establishes the state of the art at the time of the invention.

*CAF*  
*Jun 26, 2001*  
caf  
June 26, 2001



**Christopher A. Fiorilla**  
**Primary Examiner**  
**Art Unit 1731**